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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/544,614	04/06/2000	Christophe Le Roy	ATOCH-174	9121

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EXAMINER

RHEE, JANE J

ART UNIT	PAPER NUMBER
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1772

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DATE MAILED: 04/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/544,614	LE ROY ET AL.	
	Examiner	Art Unit	
	Jane J Rhee	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

1. Claim 1-8 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10-18 of copending Application No. 09544613 (Jammet et al.).

This is a provisional obviousness-type double patenting rejection. Jammet discloses in two pending applications a duplicate set of claims wherein the present application he discloses 5 to 30 parts of a polymer (A) comprising a blend of a polyethylene (A1) of relative density between 0.935 and 0.980 and of a polymer (A2) selected from the group consisting of elastomers, very low-density polyethylenes and metallocene copolymers, the (A1) + (A2) blend being cogenerated with an unsaturated carboxylic acid. This application (Applicant, Le Roy et al.) discloses 95 to 70 parts of polyethylene (B) of relative density between 0.935 and 0.950. Le Roy discloses the blend of (A) and (B) having a relative density between 0.935 and 0.950, a content of

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grafted unsaturated carboxylic acid of between 30-10,000ppm, and an MFI measured according to ASTM D 1238 at 190°C/ 2.16 kg of between 5 and 100.

Jammet discloses that the comonomer of (A1) is the same as that of (B).

Jammet discloses a binder wherein (A1) comprises at least 75 mol % of ethylene and has an $MFI_2/[\eta]^{-8.77}$ ratio greater than 15 in absolute value. Jammet discloses a binder wherein (A2) comprises at least 50 mol % of ethylene and has an $MFI_2/[\eta]^{-8.77}$ ratio greater than 15 in absolute value. Jammet discloses a binder wherein (A) has an ethylene content not less than 70 %mol and the MFI_{10}/MFI_2 ratio is between 5 and 20, where MFI_2 is the melt flow index at 190°C under a load of 2.16kg, measured according to ASTM D 1238, and MFI_{10} is the melt flow index at 190°C under a load of 10 kg according to ASTM D 1238, the intrinsic viscosity $[\eta]$ denoting the viscosity index in dl/g of a polymer measured in a decalin solution at 135°C.

Jammet discloses a multilayer structure comprising a layer directly attached to the binder, a layer selected from the group consisting of nitrogen –containing or oxygen-containing polar resin, a layer of polyamide resin, a layer of a polyester resin, and a metal layer. Jammet teaches a structure in which either a polyolefin layer or layer E is directly attached on the binder side. Jammet also teaches a structure comprising an HDPE layer of the binder, either a layer of EVOH or of an EVOH alloy or a polyamide or polyamide-based layer, a second layer of binder and an HDPE layer.

Jammet discloses a rigid hollow body made of multilayer structure. Jammet discloses a gasoline tank comprising a structure as described above.

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However, copending application (09544613) discloses, all of which is described above with the exception of a slightly lower relative density between 0.910 and 0.940. Therefore, one of ordinary skill in the art would readily determine optimum density through routine experimentation depending on the desired end results. Furthermore, it has been shown in the established legal precedent by prior case law In Re Aller, that optimum or workable ranges discovered by routine experimentation is ordinarily within the skill of the art in the absence of unexpected results.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adur et al. (4537836) in view of Nagano (4397916).

Adur et al. discloses a polymer (A) comprising a blend of polyethylene (A1) of relative density between 0.935 and 0.980 (col. 1 line 44) and a of a polymer (A2) low density polyethylene (col. 1 line 46), the (A1) + (A2) blend being cografted with an unsaturated carboxylic acid (col. 1 line 41 and col. 3 lines 4-6). Adur discloses polyethylene (B) of relative density between 0.93 and 0.95 (col. 1 line 48 and col. 2 line 40). Adur et al. discloses that the content of grafted carboxylic acid of between 30 and 10,000 ppm (col. 3 lines 59-60). Adur et al. discloses a coextrusion binder wherein

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polyethylene (A1) is a polyethylene homopolymer (col.2 line 15) with a comonomer of an alpha olefin having from 3-30 carbon atoms (col. 2 line 37), and an ester of an unsaturated carboxylic acid (col. 2 line 55). Adur et al. discloses that polymer (A2) is an ethylene/propylene elastomer (col.2 lines 7-10). Adur et al. discloses that the relative density of polyethylene (A1) is 0.940-0.965 and 0.940-0.958 (col. 1 line 44). Adur et al. discloses that the polymer (A2) is an ethylene copolymer with a comonomer of propylene or 1-octene (col. 2 line 7-11). Adur et al. discloses that a polyolefin layer is directly attached to the binder side (col. 4 lines 6-15). Adur et al. discloses that the structure further comprises an HDPE layer, a layer of EVOH, a layer of the binder and an HDPE layer (col. 1 18-30 and col. 4 lines 5-15). Adur et al. discloses that the layer described above is directly attached to the binder, a layer (E) selected from the group consisting of a layer of nitrogen-containing or oxygen-containing polar resin, a layer of polyamide resin, a layer of an aliphatic polyketone, a layer of a saponified ethylene-vinyl acetate copolymer (EVOH), a layer of a polyester resin and a metal layer (col. 4 lines 3-6). Adur et al. discloses that the layer (E) is a metal of aluminum, iron, copper, tin, nickel, or alloy thereof (col. 4 lines 34-45). Adur et al. discloses that the layer (E) is the saponified ethylene-vinyl acetate copolymer (col. 4 line 5). Adur et al. discloses a rigid hollow bodies consisting of a structure (col. 4 line 64).

Adur et al. fail to disclose 5 to 30 parts of a polymer (A) and 95-70 parts of polyethylene (B). Adur et al. fails to disclose the blend of polymer (A) and polymer (B) having a relative density between 0.930 to 0.950 and 0.930 to 0.940 and a melt flow index of between 5 and 100. Adur et al. fails to disclose that the saponified ethylene-

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vinyl acetate copolymer has a degree of saponification of about 90-100%mol. Adur et al. fails to disclose that the layer (E) is the polyamide resin comprising at least one structural unit of PA-6; PA-6,6; PA-6,10; PA-11; PA-6/6,6; or PA 12. Adur et al. fails to disclose that the layer (E) is polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a blend thereof. Adur et al. fails to disclose a gasoline tank.

Nagano however, teaches the polyamide resin comprising at least one structural unit of PA-6; PA-6,6; PA-6,10; PA-11; PA-6/6,6; or PA 12 (col. 7 line 31-34), that the saponified ethylene-vinyl acetate copolymer has a degree of saponification of about 90-100%mol (col. 7 line 36) and that the layer (E) is polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a blend thereof (col. 7 line 39-41) for the purpose of increasing the adhesive strength between the two layers (col. 1 lines 27-32). Nagano teaches a gasoline tank (col. 9 line 38) for the purpose of taking advantage of the high rigidity, mechanical strength, heat stability, and gas barrier properties of the structure (col. 9 line 29-31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided Adur et al. with the polyamide resin comprising at least one structural unit of PA-6; PA-6,6; PA-6,10; PA-11; PA-6/6,6; or PA 12, the saponified ethylene-vinyl acetate copolymer that has a degree of saponification of about 90-100%mol and the layer (E) that is a polyester resin of polyethylene terephthalate, polybutylene terephthalate, polyethylene naphthenate, or a

blend thereof in order to increase the adhesive strength between the two layers (col. 1 lines 27-32) as taught by Nagano.

It would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided Adur et al. with a gasoline tank (col. 9 line 38) in order to take advantage of the high rigidity, mechanical strength, heat stability, and gas barrier properties of the structure (col. 9 line 29-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to obtain the 5 to 30 parts of a polymer (A), 95-70 parts of polyethylene (B), the blend of polymer (A) and polymer (B) having a relative density between 0.930 to 0.950 and 0.930 to 0.940 and a melt flow index of between 5 and 100, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art in absence of unexpected results. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jane J Rhee whose telephone number is 703-605-4959. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-5408 for regular communications and 703-301-9999 for After Final communications.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Jane Rhee
April 11, 2002


HAROLD PYON
SUPERVISORY PATENT EXAMINER
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